REMARKS

The Patent Office incorrectly asserts that Rinne (US 6,201,966) anticipates claims 14-17, 19, 20-22, 30, 31, and 34-37. More particularly, these claims include independent claims 14 and 30, both of which explicitly claim the function of a wireless network determining whether to grant an additional idle time request received from a mobile station, and, only if the determination to grant was decided positively, to send information to the mobile station regarding the particulars of the idle time grant. (See claims 15, 19, and 35, for examples of idle time request refusal operations.)

In contrast, Rinne specifically teaches a network that appears to grant some amount of idle time unconditionally, responsive to receiving a request from a mobile station. That is, Rinne teaches granting some amount of idle time, whether the grant is for the idle time amount the mobile station actually requested, or for idle time that matches the request as closely as possible. Rinne does not teach or suggest any basis for refusing an idle time request, nor does Rinne appear even to contemplate the possibility of not granting the request. This omission from Rinne is not surprising, because Rinne's primary problem is responding to mobile-station initiated idle-time requests that arise from the mobile stations making base station signal quality evaluations in support of cell handover operations. The instant application on the other hand teaches commanding mobile stations to perform designated tasks, such as location determination tasks, and conditionally allocating extra idle time if needed to perform the designated tasks.

Turning to the specific errors in the Office's rejection arguments, p. 3 of the Office Action asserts that Fig. 1 and col. 4, lines 1-14 of Rinne teach the claimed limitation of determining whether to grant requested idle time to a mobile station. Actually, the cited figure and text make clear that Rinne grants the idle time as requested, or grants idle time matching the request as closely as possible. The Office Action simply ignores the clear limitations in the rejected claims

that the idle request may not be granted, and that Applicant's claimed wireless network and method send idle time information to the mobile station responsive to a request only if the network decides to grant the request.

Because Rinne does not explicitly or inherently teach the step of determining whether to grant idle time requests, it cannot anticipate independent claims 14 and 30 as a matter of law, nor any claims depending therefrom. To maintain an anticipation rejection, the allegedly anticipating reference must explicitly or inherently teach every limitation of the rejected claim(s) in the identical arrangement as claimed. Rinne does not teach conditional idle time granting and therefore cannot stand as an anticipating reference.

Further, to better highlight the correspondence between network-commanded tasks and corresponding mobile station requests for additional idle time, Applicant amended independent claim 14 to include the limitations of claim 23. Amended claim 14 now calls out the network commanding the mobile station to perform a designated task, and make clear that the mobile station's idle time request occurs where the mobile station needs additional idle time to perform the designated task. Related amendments herein cancel claim 23, and a similar incorporation of limitations from claim 32 was done for claim 30, with claim 32 now canceled.

The amendments to claims 14 and 30 add further patentable distinction over Rinne, which does not teach or suggest that a wireless communication network commanding a given mobile station to perform a designated task and receiving a corresponding idle time request from the mobile station. In light of these amendments, and in light of the above arguments, Applicant requests that the Office withdraw all anticipation rejections based on Rinne.

Turning to the remaining rejections, the Office rejects independent claims 1 and 26 as being obvious over the combination of King (US 6,313,787) and Rinne. The Office further rejects the corresponding dependent claims 4-6, 8, 9, 10, 11, 12, 13, and 27 on the same grounds.

The rejections over King in combination with Rinne are not well taken. The rejected independent claims 1 and 26 (as amended herein) both include the limitations of a mobile station receiving a request to perform a designated command, the mobile station determining whether its current operating mode allows sufficient idle time to perform the designated task, and, if not, requesting additional idle time from the network.

Against these limitations, the Office readily acknowledges that King does not teach a mobile station that determines whether its current operating mode allows sufficient idle time to perform a designated task, and readily acknowledges that King does not teach a mobile station requesting additional idle time to perform a designated task (or for any other reason). In short, the Office presents King for its bare teaching that a communication network may command a mobile station to perform a GPS-based location determination. King really provides no other details pertinent to the Office's rejection arguments, other than generically providing radio receiver hardware, and those broad details are no more than background in the context of the rejected claim limitations.

Thus, with the bare teaching from King that a mobile station may be commanded to determine its location, the Office argues that Rinne provides teachings on square with all other claim limitations, and that it would be obvious to combine Rinne with King. Such arguments do not survive even a cursory inspection of Rinne and King.

For example, the Office Action erroneously states that col. 12, lines 32-33, teach the claim limitations of a mobile station determining whether its current operating mode allows sufficient time to perform a designated task within a desired time, and otherwise requesting additional idle time from the network. First, the term "designated task" as used in the rejected claims means a task commanded by the network, and Rinne offers no relevant teachings on the network commanding the mobile station to perform a designated task. Second, the cited passage of Rinne only discloses that a mobile station can independently decide how much idle

time it needs and send a message to the network, telling the network to cutoff traffic to the mobile station for a corresponding duration.

While Rinne teaches sending the above cutoff directive to the network using the idle time request message format of Rinne, the actual text of Rinne makes clear that the information sent is not a request in that case, but rather a directive to the network to suspend traffic to the mobile station for a defined duration. Moreover, the text of Rinne says utterly nothing about how the mobile station decides on the needed amount of idle time, and makes no suggestion about the decision arising from the claimed evaluation of current operating mode.

The bottom line is that Rinne offers no teachings about a mobile station evaluating its operating mode as the basis for determining whether additional idle time is needed to perform a designated task as commanded by the network, nor does Rinne offer any teachings about a network commanding mobile stations to perform designated tasks. In the context of the rejection, Rinne teaches only that a mobile station may independently decide that it needs a particular amount of idle time and may, in response, tell the network to cutoff traffic to the mobile station for the corresponding duration. Those teachings are not relevant to the limitations in the rejected claims, whether taken alone or in combination with King.

Further, the Office Action offers no more than conclusory arguments regarding the motivation to combine Rinne with King. For example, the pp. 7, 8 of the Office Action offer line after line of explanations about the complexity of location determination calculations in King (GPS ephemeris calculations, etc.), as support for the statement that the computational load of location operations in King would make it obvious to use idle time requests as taught by Rinne.

Setting aside the fact that Rinne does not teach idle time request/grant operations as disclosed and claimed by Applicant, the proffered motivation itself fails because King apparently discloses a fully operational system for determining mobile station locations without mention of, or concern regarding mobile station idle time. That is, King never suggests or even hints that

lack of idle time is, or might be, a problem in its context. Indeed, in its forty-two pages of specification, drawings, and claims, King apparently does not even once mention the term "idle time," nor does it use any equivalent term. The concept of idle time is absent from King, which may be because of King's emphasis on GPS-based position determination, which often uses dedicated processing resources and separate radio receiver paths.

Indeed, King teaches the use of dedicated GPS receiver and signal processing resources in Figure 8, for example—see element 550, which includes a dedicated GPS antenna 532, down-converter 534, and signal correlator 540, and a separate radio communication antenna 529, with accompanying circuitry. In such contexts, the core signal reception operations associated with GPS operations and ongoing radio communications may be carried out concurrently, with no need to suspend communication traffic for the purpose of GPS-based radio reception.

In the opposite sense, however, Rinne discloses that one of the primary driving reasons for mobile stations requesting idle time is that they do not have the radio resources to monitor concurrent transmissions from different radio base stations, for the purpose of evaluating signal quality in support of handover decision processing—see Rinne at col. 1, lines 21-31, which explicitly state that (GSM) mobile stations do not have two radio receivers, and therefore need free time (idle time) to monitor different base stations.

In short, all of the Office Action's arguments and explanations about how King's computational load would make the combination of King and Rinne obvious are without any logical force. King teaches the use of dedicated, separate radio hardware and processing elements to support GPS signal reception and processing concurrent with communication network signal reception and processing, while Rinne gives the opposite context, i.e., the sharing of the same radio receiver to monitor transmissions from different base stations, as the primary reason underlying the need for idle time.

There is no motivation to combine Rinne with King. Further, the argued-for combination does not teach the limitations of the claims rejected as obvious over King and Rinne. Thus, the Office has not made out a prima facie case for obviousness and the rejections fail as a matter of law.

The various other rejections, such as the rejection of claims 24 and 25 as obvious over the combination of Rinne, King, and ANSI/TIA/EIA-136-740-2001, fail at least for the reasons given above. More generally, the allowability of all independent claims (1, 14, 26, and 30) renders moot all dependent claim rejections presented in the Office Action. However, Applicant notes that the rejected dependent claims include numerous details not found in any of the cited references, taken individually or in any combination.

With all of the above in mind, Applicant believes that all claims pending upon entry of this response stand in condition for immediate allowance, and looks forward to the Office's next communication. Of course, the undersigned attorney would welcome any opportunity to discuss this matter further with the Office.

Respectfully submitted,

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